



Staff Report

DISCUSSION AND DIRECTION ON THE SOUTH ROAD ROUND-ABOUT PROJECT

Honorable Mayor and Council Members:

Summary

City staff has been evaluating conceptual plans on better ways to facilitate traffic in a safe and efficient manner through the intersection of Ralston Avenue and South Road. The existing all-way STOP control of the intersection creates significant delays during all times of the day and is a source of increased noise and pollution caused by vehicles stopping and starting.

A feasibility study was conducted in May, 2003 to determine the best approach to accommodate traffic in a safe and efficient manner. The study evaluated the existing all-way STOP, a traffic signal and a roundabout. Staff is seeking input from Council to undertake additional analysis to determine the appropriate traffic control at this intersection that will accommodate traffic in a safe and efficient manner.

Background

The average daily traffic traveling along Ralston Avenue in the area of South Road is 25,000 vehicles per day. The average daily traffic traveling along South Road at Ralston Avenue is less than 2,000 vehicles per day. The existing all-way STOP at the intersection of Ralston Avenue and South Road is currently operating in excess of capacity during the morning, midday, and evening peak hours.

The collision history of Ralston Avenue and South Road from 2000 through 2006 indicates that there were 19 collisions. Six of these collisions were rear-end type and five were broadside type of collisions. The number of rear-end type of collisions are expected at all-way stops with the volume of traffic traveling through the intersection. The number of broadside collisions is surprisingly high for an intersection controlled by all-way STOPS.

The feasibility study undertaken in March, 2003 indicates that a traffic signal and roundabout provide high levels of service for all the peak periods of the day. Under year 2011 traffic forecast, the intersection will continue to operate at high level of service for either scenario. However, traffic from South Road may have difficulty entering the westbound traffic stream in

the PM peak with a roundabout.

A one-lane roundabout has fewer conflict points than a conventional intersection. Therefore, the roundabout alternative is expected to have fewer vehicle and pedestrian collisions than compared to a conventional traffic signal. Both the rear-end and broadside type of collisions will be virtually eliminated with a roundabout.

It should be noted Notre Dame de Namur University has a condition on their Campus Master Plan to pay for the installation of a traffic signal at the intersection of Ralston Avenue and South Road.

Discussion

Additional analysis is required to determine whether or not a roundabout or a conventional traffic signal is the most appropriate means to control the intersection of Ralston Avenue and South Road.

The design of the roundabout needs to accommodate anticipated movements of City fire trucks, transit and school buses, and 18 wheel tractor trailers. Additional analysis is required to determine whether or not all these vehicles can be accommodated by a roundabout within the existing right-of-way.

Staff believes the additional analysis that includes a visual simulation of the actual traffic traveling through a roundabout will provide Council the necessary information to make a decision on installing a roundabout at this location.

Discussion and Direction

City staff needs direction on the following question:

Should additional analysis be undertaken to determine whether or not a roundabout is feasible for the intersection of Ralston Avenue and South Road?

General Plan/Vision Statement

No impact.

Fiscal Impact

It is anticipated the cost of additional analysis will be less than \$10,000. There is money in the budget to cover the cost of any analysis.

Public Contact

Posting of City Council agenda.

Recommendation

It is recommended that Council authorize staff to undertake additional analysis to determine the feasibility of a roundabout at the intersection of Ralston Avenue and South Road.

Alternatives

1. Take No Action.
2. Refer back to staff for further information.
3. Deny the request.

Attachments

- A. None

Respectfully submitted,

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